

SEQUENCE LISTING

<110> Robert G. Korneluk et al.

<120> METHODS AND COMPOUNDS FOR MODULATING
MALE FERTILITY

<130> 07891/018002

<140> 09/239,867

<141> 1999-01-29

<150> 60/073,001

<151> 1998-01-29

<160> 10

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1559

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1559)

<223> n = A,T,C or G

<400> 1

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tcaaaaacgt ttgctggctt tgcaggtggt gggcctgcct gggcatcggc gcgttggagg      180
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aggagttagc aaacacaaga aagcagcgcc gaattgcagg tttatccgca gcttttattt      300
tgaagacagt gccacgaaac ctgcaaatec tgggtgtcca aatagtcaat accaagttga      360
aaaccatctg ggagaggaaa agcgttgtgc tttagacagg ccgtatgaga ctcgtagcaga      420
ccggcttttg agagctggac aggtggtgga tagatcagac tccatacacc cgaggagccc      480
cgccatgcat agtgaagaag ctagataaca gtcgtttcac aactggccag cctctgccc      540
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gcagtgtctt tgttgtggcg gaaaactgaa aaactgggaa cctggtgatc gtgcctggtc      660
agaacacagg agacattttc ctaattgctt ctttattttg ggccacaacg ttaatatctg      720
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gaatccatcc atgacggggt atgaagcccg gctcattact tttgggacat ggatgtactc      840
cgtcaacaaa gagcagcttg caagagctgg attttatgct ataggtcaag aggataaagt      900
acagtgtctt cactgtggag gagggctagc caactggaag cccaaggaag atccttggga      960
acagcatgct aaatggtatc caggttgcaa atatctgcta gaagagaagg gacatgaata     1020
tataaacaac attcatttaa cccgttcact tgaggagct ctggtacaaa ctaccaagaa     1080
aacaccatca ctaactaaaa gaatcagtga taccatcttc cctaatecta tgctacaaga     1140
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| | | | | | | |
|------------|------------|------------|------------|------------|------------|------|
| aacatctggg | agcaactata | aaacgcttga | ggttcttgtt | gcagatctag | tgagcgctca | 1260 |
| gaaagacact | acagaaaatg | aattgaatca | gacttcattg | cagagagaaa | tcagccctga | 1320 |
| agagccgcta | aggcgtctgc | aagaggagaa | gctttgtaaa | atctgcatgg | acagatatat | 1380 |
| cgctgttgtt | tttattcctt | gtggacatct | ggtcacttgt | aaacaatgtg | ctgaagcagt | 1440 |
| tgacagatgt | cccatgtgca | gcgcggttat | tgatttcaag | caaagagttt | ttatgtctta | 1500 |
| atgtaactct | acagtgggtg | tgctatgttc | ttattaccct | gattaaatgt | gtgatgtga | 1559 |

<210> 2
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 <212> PRT
 <213> Homo sapiens

<400> 2

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| Met | Thr | Gly | Tyr | Glu | Ala | Arg | Leu | Ile | Thr | Phe | Gly | Thr | Trp | Met | Tyr |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Ser | Val | Asn | Lys | Glu | Gln | Leu | Ala | Arg | Ala | Gly | Phe | Tyr | Ala | Ile | Gly |
| | | 20 | | | | | | 25 | | | | | 30 | | |
| Gln | Glu | Asp | Lys | Val | Gln | Cys | Phe | His | Cys | Gly | Gly | Gly | Leu | Ala | Asn |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Trp | Lys | Pro | Lys | Glu | Asp | Pro | Trp | Glu | Gln | His | Ala | Lys | Trp | Tyr | Pro |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Gly | Cys | Lys | Tyr | Leu | Leu | Glu | Glu | Lys | Gly | His | Glu | Tyr | Ile | Asn | Asn |
| 65 | | | | 70 | | | | | | 75 | | | | 80 | |
| Ile | His | Leu | Thr | Arg | Ser | Leu | Glu | Gly | Ala | Leu | Val | Gln | Thr | Thr | Lys |
| | | | | 85 | | | | | 90 | | | | | 95 | |
| Lys | Thr | Pro | Ser | Leu | Thr | Lys | Arg | Ile | Ser | Asp | Thr | Ile | Phe | Pro | Asn |
| | | 100 | | | | | | 105 | | | | | 110 | | |
| Pro | Met | Leu | Gln | Glu | Ala | Ile | Arg | Met | Gly | Phe | Asp | Phe | Lys | Asp | Val |
| | | 115 | | | | | 120 | | | | | 125 | | | |
| Lys | Lys | Ile | Met | Glu | Glu | Arg | Ile | Gln | Thr | Ser | Gly | Ser | Asn | Tyr | Lys |
| | | 130 | | | | 135 | | | | | 140 | | | | |
| Thr | Leu | Glu | Val | Leu | Val | Ala | Asp | Leu | Val | Ser | Ala | Gln | Lys | Asp | Thr |
| 145 | | | | | 150 | | | | | 155 | | | | 160 | |
| Thr | Glu | Asn | Glu | Leu | Asn | Gln | Thr | Ser | Leu | Gln | Arg | Glu | Ile | Ser | Pro |
| | | | | 165 | | | | 170 | | | | | | 175 | |
| Glu | Glu | Pro | Leu | Arg | Arg | Leu | Gln | Glu | Glu | Lys | Leu | Cys | Lys | Ile | Cys |
| | | | 180 | | | | 185 | | | | | 190 | | | |
| Met | Asp | Arg | Tyr | Ile | Ala | Val | Val | Phe | Ile | Pro | Cys | Gly | His | Leu | Val |
| | 195 | | | | | | 200 | | | | | 205 | | | |
| Thr | Cys | Lys | Gln | Cys | Ala | Glu | Ala | Val | Asp | Arg | Cys | Pro | Met | Cys | Ser |
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<210> 3
 <211> 1588
 <212> DNA
 <213> Homo sapiens

<400> 3
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gcagggtttc ttatatactg tgaaggagat accgtgcggt gctttagtgt tcatgcagct 240
gtagatagat ggcaatatgg agactcagca gttggaagac acaggaaagt atccccaaat 300
tgcagattta tcaacggctt ttatcttgaa aatagtgcca cgcagtctac aaattctggt 360
atccagaatg gtcagtacaa agttgaaaac tatctgggaa gcagagatca ttttgcctta 420
gacaggccat ctgagacaca tgcagactat cttttgagaa ctgggcaggt tgtagatata 480
tcagacacca tatacccgag gaaccctgcc atgtatagtg aagaagctag attaaagtcc 540
tttcagaact ggccagacta tgctcaccta accccaagag agttagcaag tgctggactc 600
tactacacag gtattggtga ccaagtgcag tgcttttggt gtggtggaaa actgaaaaat 660
tggaacactt gtgatcgtgc ctggtcagaa cacaggcgac actttcctaa ttgcttcttt 720
gttttgggccc ggaatcttaa tattcgaagt gaatctgatg ctgtgagttc tgataggaat 780
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<210> 4
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<212> PRT
<213> Homo sapiens

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Glu Gly Asp Lys Val Lys Cys Phe His Cys Gly Gly Gly Leu Thr Asp
      35              40              45
Trp Lys Pro Ser Glu Asp Pro Trp Glu Gln His Ala Lys Trp Tyr Pro
      50              55              60
Gly Cys Lys Tyr Leu Leu Glu Gln Lys Gly Gln Glu Tyr Ile Asn Asn
      65              70              75              80
Ile His Leu Thr His Ser Leu Glu Glu Cys Leu Val Arg Thr Thr Glu
      85              90              95
Lys Thr Pro Ser Leu Thr Arg Arg Ile Asp Asp Thr Ile Phe Gln Asn
      100              105              110
Pro Met Val Gln Glu Ala Ile Arg Met Gly Phe Ser Phe Lys Asp Ile
      115              120              125
Lys Lys Ile Met Glu Glu Lys Ile Gln Ile Ser Gly Ser Asn Tyr Lys
      130              135              140

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Ser Leu Glu Val Leu Val Ala Asp Leu Val Asn Ala Gln Lys Asp Ser
 145 150 155 160
 Met Gln Asp Glu Ser Ser Gln Thr Ser Leu Gln Lys Glu Ile Ser Thr
 165 170 175
 Glu Glu Gln Leu Arg Arg Leu Gln Glu Glu Lys Leu Cys Lys Ile Cys
 180 185 190
 Met Asp Arg Asn Ile Ala Ile Val Phe Val Pro Cys Gly His Leu Val
 195 200 205
 Thr Cys Lys Gln Cys Ala Glu Ala Val Asp Lys Cys Pro Met Cys Tyr
 210 215 220
 Thr Val Ile Thr Phe Lys Gln Lys Ile Phe Met Ser
 225 230 235

<210> 5
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 <213> Homo sapiens

<220>
 <221> misc_feature
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 <223> n = A,T,C or G

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 caaagtgaaa caagcacaaa aaagaacgag acacgggagc ggggcacgag gtgctcactg 180
 ngcaagcgcc cactccaccg cgtgggtttcc agctggaggc tgggagcggt ngtggcttcc 240
 tcttttcttg ctgacccttc ggagctctgg gaagtggctg caccttggcg gctccccaga 300
 gcgcgcggtg ctaatcgtgg gtcgtcagcc tgggtggctg ggcccggctt agggcagggt 360
 ttggcatttc caatggtagg gggctcggac cgtccctccg cgggaccctc ccgttgggac 420
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 atattcaaga gaagataact 500

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 <212> PRT
 <213> Artificial Sequence

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 <223> Based on Cydia pomonella and Orgyia pseudotsugata

<221> VARIANT
 <222> (1)...(67)
 <223> Xaa = Any Amino Acid

<221> VARIANT
 <222> (1)...(67)
 <223> Xaa = Any Amino Acid

<400> 6

Xaa Xaa Xaa Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Xaa Xaa Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35 40 45
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa Xaa Cys
 50 55 60
 Xaa Xaa Xaa
 65

<210> 7
 <211> 68
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 <213> Artificial Sequence

<220>
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<221> VARIANT
 <222> (1)...(68)
 <223> Xaa = Any Amino Acid

<221> VARIANT
 <222> (1)...(68)
 <223> Xaa = Any Amino Acid

<400> 7
 Xaa Xaa Xaa Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 35 40 45
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa Xaa
 50 55 60
 Cys Xaa Xaa Xaa
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<221> VARIANT

<222> (1)...(69)

<223> Xaa = Any Amino Acid

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20 25 30
Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa
35 40 45
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa His Xaa Xaa Xaa Xaa Xaa
50 55 60
Xaa Cys Xaa Xaa Xaa
65

<210> 9

<211> 70

<212> PRT

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<220>

<223> Based on *Cydia pomonella* and *Orgyia pseudotsugata*

<221> VARIANT

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<222> (1)...(70)

<223> Xaa = Any Amino Acid

<400> 9

Xaa Xaa Xaa Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa Xaa
20 25 30
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa
35 40 45
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa His Xaa Xaa Xaa Xaa
50 55 60
Xaa Xaa Cys Xaa Xaa Xaa
65 70

<210> 10

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<212> PRT

<213> Artificial Sequence

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<223> Based on *Cydia pomonella* and *Orgyia pseudotsugata*

<221> VARIANT
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<223> Xaa = Any Amino Acid

<221> VARIANT
<222> (1)...(35)
<223> Xaa = Any Amino Acid

<400> 10
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1 5 10 15
Xaa His Xaa Xaa Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys
20 25 30
Xaa Xaa Cys
35